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AIR UNIVERSITY

AIRPOWER CONTRIBUTIONS TO IRREGULAR WARFARE

BY

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Biography

Col. James “Keith” McKenzie is a career aircraft maintenance officer, currently a student of the Air War College. He began his career in 1986 as an aircraft maintenance officer on RF-4C aircraft at then Bergstrom AFB, TX. From there, he gained experience on several other fighter aircraft at Shaw AFB, SC before his first Headquarters assignment at Headquarters, Air Education and Training Command. His departure landed him in South Korea as the Senior Maintenance Officer for the 31 Special Operations Squadron at Osan, ROK. From that point, he gained 9 years Special Operations experience, first in the Air Force Special Operations Command, where he commanded the 16th Helicopter Maintenance Squadron, then Special Operations Command, Pacific, where he served as the J4, and finally at Headquarters, United States Special Operations Command, where he served as the Deputy J4. Col. McKenzie has received countless individual and unit awards throughout his career, including the Bronze Star Medal and the Defense Superior Service Medal. In addition, he gained valuable operational experience in Operations DESERT SHIELD/STORM/CALM, ENDURING FREEDOM (Afghanistan and Philippines), and IRAQI FREEDOM.

Chapter 1

Introduction

Current operations throughout five geographic combatant commands collectively demonstrate the need for a totally flexible and adaptable U.S. Air Force. No longer are we focused exclusively on a type of warfare in which we can dominate in short, kinetic and decisive engagements. Understanding this premise is absolutely critical to the future. The United States Air Force's ability to conduct persistent Irregular Warfare in denied, ungoverned and under governed areas is critical to the Department of Defense's overall ability to wage IW, accomplish strategic objectives and win both current and future wars.

The United States Air Force has developed capabilities over the past several decades to deter major regional state actors, and when necessary, gain rapid, decisive air superiority. Over this period, the AF has proven itself exceptionally proficient in this role. In major conflicts of the past, this focus was adequate and enabled the Department of Defense to exercise airpower decisively across the range of military operations from humanitarian to major combat operations. Post 9/11, the nature of warfare confronting the United States has changed fundamentally in its focus. The U.S. is now faced with different threats in every geographic region of the world, many of which are based on extreme ideologies that target the basic existence of western cultures. These threats are not necessarily bound by geographic borders. They operate asymmetrically and through irregular tactics, techniques and procedures to blend in to populations, making it more and more difficult to determine and attack centers of gravity or

critical nodes without unintended consequences. This type of operating environment uses all available networks and requires a whole-of-government approach supported by airpower, intensive Intelligence, Surveillance, and Reconnaissance (ISR), and complex enabling capabilities. The type of warfare we are currently engaged in actually has been the most common form of warfare throughout history, and is the only kind of war that America has ever lost. This form of warfare has also defeated countless other strong military nations of the past.¹ Its complexity has arguably become much greater in the past decade, as the operating environment changed through the effects of globalization, advancements and innovation. It is therefore a reasonable assumption that the United States should plan to wage Irregular Warfare (IW) for the foreseeable future.

The Air Force's ability to train, work with, and build capacity in partner nations, employ surrogates, and conduct operations across the range of military operations, in permissive (green), hostile (red) and brown environments in non-belligerent states, defines its relevance. Brown environments are defined as, "states with which we are not at war that offer denied (to the U.S.), ungoverned, or under-governed areas that can provide potential sanctuary for transnational terrorist networks and other non-state adversaries."² This study will address the gaps, seams, and mismatches in current airpower capabilities, which if addressed, will enhance the Department of Defense's ability to conduct IW now and in the future. Beginning with the National Strategy, it will address current strategy and doctrine, down to the Air Force level, as it applies to IW and associated requisite capabilities. It will analyze these capabilities and make recommendations to ensure the Air Force's relevance in the future as it supports IW.

¹ Colonel Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century* (St. Paul, MN: Zenith Press, 2004), 2-3.

² Department of Defense, *Joint Capabilities Document for the Irregular Warfare Joint Operations Concept Capabilities-Based Assessment* (Washington, DC: JROC, Draft Version .9), C-3.

Chapter 2

Existing Doctrine

National Strategy

Beginning with the National Security Strategy, President Bush in his opening letter states, “America is at war. This is a wartime national security strategy required by the grave challenge we face—the rise of terrorism fueled by an aggressive ideology of hatred and murder, fully revealed to the American people on September 11, 2001. This strategy reflects our most solemn obligation: to protect the security of the American people.”³ Key in his strategy, and pertinent to development of IW capabilities, is language that addresses the need to develop capable partners and the commitment to continue to pursue reforms that better enable interagency cooperation within the United States Government.⁴

In the supporting National Defense Strategy, the five key objectives listed are to defend the homeland, win the long war, promote security, deter conflict, and win our nation’s wars. To achieve these objectives, we must shape the choices of key states, prevent adversaries from acquiring or using weapons of mass destruction, strengthen and expand alliances and partnerships, secure U.S. strategic access and retain freedom of action, and integrate and unify

³ President of the United States, The National Security Strategy of the United States of America, March 2006, Introduction.

⁴ Ibid., 5.

our efforts.⁵ These key objectives offer a clear and concise focus for the Department of Defense now and in the future, and are pertinent and supportable through IW.

The February 2006 Quadrennial Defense Review Report recommendations support the National Security and Defense strategies and outline requisite Joint Air Capabilities that the Department of Defense intends to invest in the future. The subsequent publishing of the QDR IW Roadmap, among other things, directed United States Special Operations Command to develop a joint concept for IW.⁶ This task resulted in the publishing of the IW Joint Operational Concept (IWJOC), which represents the most significant, current joint capabilities development guidance across the spectrum of doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF).

Joint Doctrine

The purpose of the IWJOC is “to describe how future joint force commanders (JFCs) could conduct protracted IW to accomplish national strategic objectives in the 2014-2026 timeframe.”⁷ The IWJOC’s definitions and central and supporting ideas are rapidly migrating to Joint Doctrine. The critical definition of Irregular Warfare follows:⁸

A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular Warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary’s power, influence, and will. Also called IW.

⁵ Department of Defense, *The National Defense Strategy of the United States of America* (Washington, DC: Office of the Secretary of Defense, June 2008), 6-18.

⁶ Kenneth C. Coons Jr., and Glenn M. Harned, “Irregular Warfare is Warfare,” *Joint Force Quarterly*, Issue 52 (1st Quarter 2009): 99.

⁷ Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 5.

⁸ Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001 (as amended through 17 October 2008), 282.

Irregular Warfare consists of a wide range of activities which either occurs independently or within the more “traditional” state-based combat operations.⁹ The following activities are examples of the type and range of operations that can be inclusive of Irregular Warfare: Insurgency, counterinsurgency (COIN), unconventional warfare (UW), terrorism, counterterrorism (CT), foreign internal defense (FID), stabilization, security, transition, and reconstruction operations (SSTRO), strategic communications, psychological operations (PSYOP), information operations (IO), civil-military operations (CMO), intelligence and counterintelligence activities, transnational criminal activities, including narco-trafficking, illicit arms dealing, and illegal financial transactions that support or sustain IW, and law enforcement activities focused on countering irregular adversaries.¹⁰ Of note, until publishing of the Irregular Warfare Joint Operating Concept in 2007, strategic communications was not included as one of these activities, but now is.¹¹ Capabilities that are required for IW are defined in the IWJOC by “tasks that enable the operations cycle, the conditions that impact the tasks, and the performance standards for these tasks.”¹² These capabilities include planning, preparation, execution, assessment, force development, and force management.¹³

At the time the IWJOC was published, USSOCOM recognized that the Appendix C, outlining these capabilities needed further refinement.¹⁴ Through further analysis and concept of operations development, it was determined that the conditions and desired effects under which

⁹Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 9.

¹⁰ *Ibid.*, 10.

¹¹ United States Joint Forces Command, Joint Warfighting Center, *Irregular Warfare Special Study* (Suffolk, VA: US JFCOM Joint Warfighting Center, 4 August 2006), 7-14.

¹² Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 34.

¹³ *Ibid.*, 35.

¹⁴ Kenneth C. Coons Jr., and Glenn M. Harned, “Irregular Warfare is Warfare,” *Joint Force Quarterly*, Issue 52 (1st Quarter 2009): 102.

the joint force executes within IW are different than those within the conventional construct.¹⁵ In addition, IW focuses on relevant populations versus an enemy, IW operations are typically nonlinear, and preparation of the environment sets the conditions necessary to conduct operations. These aspects drove the necessity to further examine appropriate capabilities for the joint force and publishing of a revised appendix C in late July 2007.¹⁶ The current capabilities, outlined as tier 2 tasks in the revised appendix C are: Plan for IW, prepare for IW, conduct intelligence operations, sync strategic communications, conduct information operations, conduct FID operations, conduct COIN operations, conduct UW operations, conduct SSTR operations, and assess IW campaigns.¹⁷

In breaking down the required joint capabilities, the Air Force is particularly suited to perform many of the required subordinate tasks. As stated in the IWJOC, these capabilities must exist in both the general purpose forces as well as special operations forces in order to maintain the necessary force density and capacity.¹⁸ It is important to note however, that in the past, many of the tasks that support irregular warfare have typically and predominately been performed by special operations forces. Adding to or robusting general purpose forces capabilities in support of the Irregular War is necessary in order for the United States to achieve the needed capacities for IW.

Air Force Doctrine

Within Air Force doctrine, Air Force Doctrine Document, AFDD 2-3, titled *Irregular Warfare*, outlines key activities that the Air Force performs within IW. These activities include

¹⁵Kenneth C. Coons Jr., and Glenn M. Harned, "Irregular Warfare is Warfare," *Joint Force Quarterly*, Issue 52 (1st Quarter 2009).

¹⁶ Department of Defense, *Revised Appendix C to the Irregular Warfare Joint Operating Concept*, c1-c3.

¹⁷ *Ibid.*, c5-c19.

¹⁸ Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 34.

COIN, support to COIN, support to insurgency, counterterrorism, and shaping and deterring. The specific capabilities within the activities outlined include: building partnership capacity, information operations, intelligence and counterintelligence operations, mobility, agile combat support, precision engagement, and command and control.¹⁹ The Air Force's commitment to providing these capabilities is secondary, however, to providing air superiority. AFDD 2-3 states "while not listed, and often assumed, potential threats to air superiority should be considered before employing airpower to conduct activities listed in figure 1.3."²⁰ This figure describes the activities and capabilities previously identified. This vision for priority of effort reigns throughout AF doctrine and it is clear as a result, that commitment to IW within the Air Force has, in the past, been left wanting. In two of the three IW JOC operational environments, this is irrelevant and unnecessary as the preponderance of IW activities present no air superiority challenge. IW can and often is conducted within the boundaries of a sovereign nation and among populations who offer absolutely no threat from the air and very limited threat from ground to air. Understanding this fact, and conducting appropriate risk assessment will enable the AF to determine the appropriate balance of capabilities that it must possess supporting both regular warfare and IW. In addition, the Air Force should consider revising their doctrine to make it more accurate and aligned with Joint and AF concepts by aligning their reference to IW operational activities with the terminology used in the published IW Joint Operating Concept as they are currently pursuing in the draft U.S. Air Force Irregular Warfare Operating Concept, dated September 2008. Within this document, necessary capabilities and subordinate tasks are

¹⁹ Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, 1 August 2007, 5.

²⁰ Ibid.

identified and aligned with the current IWJOC.²¹ That stated, the Air Force's current focus in IW is accurately placed on influencing the relevant populations.²²

The Air Force provides critical resources that enable capabilities through its stated 17 key airpower functions as outlined in AFDD1.²³ These 17 key functions are broad enough in scope for the Air Force to be able to match the required operational IW capabilities within existing AF doctrine. In addition, it is important to note that these functions are not necessarily unique to the Air Force and that they can be and often are provided, to some degree, through the airpower the other services.²⁴ Based on density of current airpower assets, there are many functional capabilities requiring further investment such as ISR and air mobility, for example, to ensure airpower's ability to provide capacities to best support IW based on many recent lessons learned.

According to Air Force Doctrine, AFDD 2-3, "the cross cutting characteristics of IW may shape how the Air Force should organize, train, and equip to provide ready and relevant forces to the JFC."²⁵ Arguably, doctrine is taking a much softer approach to this capability than should rightfully be expected. That said, the Air Force *must* organize, train, and equip to be able to conduct IW in support of the Joint Force Commander objectives by assessing, acquiring, and fielding capabilities with adequate capacities that better support IW as opposed to the historic overwhelming weight of effort applied to conventional warfare and direct operations. According to Dr. Record in a briefing given to the Air War College on 25 September, 2008, the Air Force, as well as DOD, must be careful about swinging the pendulum too far toward IW, however; at the expense of other necessary capabilities that support conventional warfare. The development

²¹ Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 11-15.

²² Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, 1 August 2007, 5.

²³ *Ibid.*, 4.

²⁴ Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, 17 November 2003, 40.

²⁵ Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, 1 August 2007, 14.

of and strength in these other core capabilities is the reason that we are currently fighting predominately in IW environments. No other force currently has the physical ability to conduct direct force-on-force operations against the United States in the air and aggressors are forced to fight asymmetrically and unconventionally to gain advantage.²⁶ To reiterate this point, Secretary Gates in a recent article in *Foreign Affairs* stated that a balanced strategy and unconventional thinking is absolutely critical for the future of the United States.²⁷ We have been successful in the past, but now a very delicate balance must be achieved and senior Air Force leadership must be able to accurately prioritize and enable rapid development and fielding of capabilities and requirements across the spectrum of operations, including IW in order to enable success in current and future joint operations.

It is important to note, that within Air Force circles, the terms Irregular Warfare and Counterinsurgency Operations (COIN) are frequently used synonymously. This is a critical misrepresentation of the relationship between the two and implied is the disproportionate focus on the two major, mostly kinetic types of Air Force support operations currently in progress in Afghanistan and Iraq where the measure of merit is response time for troops in contact. IW does, in fact, include COIN, as previously discussed, but also includes activities such as counterterrorism (CT), building partnership capacity (BPC), foreign internal defense (FID), stability operations, and many others which cannot be ignored and are just as, if not more relevant.²⁸ Additionally, the IW JOC central idea's key elements include a significant focus on indirect action of which fires are not necessarily a part.²⁹

²⁶ Dr Jeffery Record, "Counterinsurgency & America's Strategic Culture: Why Insurgencies Win" (lecture, Air War College, Maxwell AFB, AL, 25 September 2008).

²⁷ Robert M. Gates, "A Balanced Strategy," *Foreign Affairs*, January/February 2009: 1-6.

²⁸ Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 6.

²⁹ Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 19-20.

Chapter 3

Current Airpower Capabilities Supporting IW

The Air Force supports IW through its 17 core functions as outlined in AFDD1. The AF views these functions as broad, continuing functions that do not necessarily have to be performed exclusively by the AF, but that do collectively support the joint force commander in achieving their tactical, operational, and strategic level objectives.³⁰ These core functions, which have evolved through the history of airpower, include strategic attack, counter air, counter space, counter land, counter sea, information operations, combat support, command and control, airlift, air refueling, space lift, special operations, intelligence, surveillance and reconnaissance, combat search and rescue, navigation and positioning, and weather services.³¹ These functions contribute to the Air Force's IW capabilities also outlined in Air Force doctrine.

The Air Force's seven published key IW capabilities as outlined in AFDD 2-3 include building partnership capacity, intelligence, surveillance and reconnaissance (ISR), information operations (IO), air mobility, agile combat support, precision engagement, and command and control.³²

Building Partnership Capacity

In building partnership capacity, the Air Force most significantly contributes a small squadron sized element, the 6 Special Operations Squadron, which performs primarily aviation foreign internal defense (AvFID). Though the 6 SOS has done an outstanding job, its capacity to

³⁰ Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, 17 November 2003, 39-40.

³¹ *Ibid.*, 40-58.

³² Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, 1 August 2007, 5.

conduct FID on any sizeable scale is extremely limited. According to its members and the recent Air Force Lessons Learned from Iraq and Afghanistan, demand for capabilities that this unit provides currently exceeds its capability.³³ Beyond that capability, and recently, the Air Force has made great strides in establishing and training aviation advisors (AA) in the current, on-going efforts in Iraq and Afghanistan using general purpose forces (GPF) and has begun training advisors at its Expeditionary Warfare Center, but lacks the dedicated resources to institutionalize it.³⁴ Building partner nation capacity has evolved as one of the most important aspects of the war against ideological extremism and is a key task in many of the joint capability areas, and the Air Force is still falling short.³⁵ Institutionalizing training, resourcing and other key aspects of this capability across the Air Force, including GPF, to include regional familiarization training and language training will also help to close the gap on the capacity deficit.

Intelligence, Surveillance and Reconnaissance (ISR)

The Air Force has tremendous capacity to perform ISR and this represents perhaps the most critical capability supporting IW the Air Force brings to bear. The current fights in Afghanistan and Iraq, however, are consuming much of this capacity. Even within those two Areas of Responsibility, the AF is equipping aircraft which are not primary reconnaissance platforms with advanced targeting pods (ATP) to cover the capacity deficit, leading one to conclude that the current shortfall in ISR is significant. Even equipping aircraft with the ATP, the AF has no capability to fuse the data received from these weapons systems, nor significant capacity to integrate the data into the Joint Intelligence Architecture.³⁶ IW is being waged in nearly every theater and as a result, the AF capacity to provide adequate support is even more

³³ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 12.

³⁴ *Ibid.*, 11.

³⁵ *Ibid.*, 1.

³⁶ *Ibid.*, 25.

challenged. Significantly, the Air Force is not the only service to execute ISR. All of the other services as well as interagency organizations maintain some of this capability and share in the responsibility. That stated, the ground forces insatiable appetite for ISR is leaving airpower's capacity to support them drastically short from a simple resourcing perspective. The Air Force is also suffering from a large number of joint sourcing solution requirements for intelligence analysts, leaving their ability to analyze intelligence products that are available shallow as well.³⁷ The obligation of U.S. Army resources for both tactical and operational level ISR and the use of contract organizations, such as Blackwater and others, to fill the capacity shortfall is commonplace and indicative of the severity of this capability gap.

Information Operations (IO)

IO, across DOD and interagency contains the capabilities of civil affairs, computer network attack, deception, destruction, electronic warfare, operations security, public affairs, and psychological operations.³⁸ The Air Force executes IO using capabilities provided by the 67th Network Warfare Wing across the combatant commands, and does so exceptionally well within this organization's capacity. The 67th Network Warfare Wing has contributed much in the Afghanistan and Iraq areas of responsibility in terms of Electronic Warfare (EW), which is a key tenant of IW, but its other contributions under the IO umbrella are less significant. The Air Force Lessons learned stated that "senior officers within the 67NWW felt the USAF is not leveraging all its cyber capabilities to deliver timely tailored messages to counter or disrupt the instant propaganda messages of terrorists and insurgents."³⁹ Air Force leadership is currently

³⁷Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 2.

³⁸ Leigh Armistead, *Information Operations: Warfare and the Hard Reality of Soft Power* (Washington, DC: Brassey's Inc., 2004), 20.

³⁹ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 30.

looking at ways to enhance its contribution in many of these areas.⁴⁰ Adversaries of the U.S. are able to exploit commercial-off-the-shelf technologies well inside of the restrictive U.S. acquisition processes, and gain proportional advantages.⁴¹ Of note, according to Dr. George Stein, professor at the Air War College at Maxwell AFB, AL., in a lecture to his information warfare and strategy seminar in October 2008, the subject of IO FID has never been addressed at the governmental or even defense department level. In addition, the U.S., based on the whole of government approach, has not been able to successfully establish a successful strategic IO campaign focused on the influence of relevant populations.⁴² This point is identified as one of the key risks in the current IWJOC.

Air Mobility

Perhaps one of the Air Force's greatest contributions to IW lies in its ability to conduct air mobility.⁴³ It owns most of the resources within the United States that are dedicated to providing strategic airlift. Strategic airlift however is only part of the equation that must be considered when discussing air mobility as a capability. Both inter- and intra-theater airlift are capabilities which are absolutely required to enable successful IW operations. Overall, the Air Forces capacity suffers from dispersion and scarcity driven by current operations in Iraq and Afghanistan. The decision to forward base C-17's has shown significant benefit in the current two major operations, but detracts from the Air Force's ability to support other inter- and intra-theater requirements in other major theaters of operation and across the globe. The Air Force also possesses limited capability to perform low-visibility, short takeoff and landing airlift

⁴⁰ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 29.

⁴¹ *Ibid.*, 32.

⁴² Department of Defense, *Irregular Warfare Joint Operating Concept* (Washington, DC: Office of the Secretary of Defense, Version 1, 11 September 2007), 39.

⁴³ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 2.

operations with non-standard aviation assets within its special operations community, but has placed little priority in the past on the importance of maintaining low-visibility as a service and little capability exists within the general purpose forces. Maintaining low visibility, the ability to hide in plain sight, and short takeoff and landing ability for unimproved runways, are the key factors in being able to operate within sovereign nations or brown environments, and key to executing many of the airpower related tasks in the IWJOC and revised appendix C. Significantly, a focus on non-standard aviation (NSA) is not mentioned in the draft Air Force Irregular Warfare Operating Concept, dated September 2008.

Medical evacuation (MEDEVAC), which is considered a subset of air mobility is also executed by the Air Force as well as other services through a variety of means, whether by organic or contract assets. This is perhaps one of the most challenging capabilities to maintain in remote ungoverned and/or under governed areas. Only a limited number of assets that the Air Force uses to conduct these types of operations are actually considered non-standard or low-visibility and most are contracted with civilian companies, as with current operations in the Philippines. Availability of MEDEVAC assets or assets that can be used to perform MEDEVAC tasks is limited in density also due to the two major on-going wars in Iraq and Afghanistan, where they have however been one of the greatest success stories of employment of airpower.⁴⁴

Agile Combat Support

Within the realm of support functions within the Air Force, Agile Combat Support (ACS), has been a key enabler in IW operations and it is anticipated that it will be for the foreseeable future. Security forces personnel, civil engineers, office of special investigations personnel and countless others have adopted changes in their tactics, techniques, and procedures

⁴⁴ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 2.

to function more effectively in IW.⁴⁵ This has been readily evident in Iraq and Afghanistan, but not necessarily in other theaters. Iraq and Afghanistan are important to study, but it is critical to maintain that these two operations are not necessarily models for IW now or in the future. They are currently representative of only one type of operating environment, permissive, and do not represent necessarily the type of environments the U.S. will operate within in the future which include potentially brown as well as non-permissive environments. The ACS capabilities that have been developed by the Air Force are critical in maintaining success on the IW battlefield. The Air Force's commitment to ACS is clearly demonstrated in the draft of their Irregular Warfare Operating Concept. In this document they outline their intent to use ACS forces to develop partner nation personnel in both logistics and services infrastructure functions.⁴⁶

Precision Engagement

Precision engagement is the United States asymmetric advantage on the IW battlefield. Precision engagement capability is made possible by ISR, the wide range of technologically superior fighter aircraft with advanced targeting systems, and more specialized aircraft that exist within the special operations community. The Air Force has excess capacity to perform precision engagement, as it is classically considered, with its large number of modified fighter platforms and weaponry, but consideration for non-standard assets performing these functions has been given only minimal consideration.

Integration of Joint Tactical Air Controllers (JTACs) has been and will continue to be a huge enabler in IW. Technological advancements have enabled complete integration with

⁴⁵Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 2.

⁴⁶ Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 15.

ground forces in the execution of select targets. Ground forces, all the way down to the company level, view these airpower assets as absolutely critical in support of their mission.⁴⁷

Command and Control

The Air Force provides centralized command and control and decentralized execution through a network of theater based Air Operations Centers (AOC's), each led by a single Joint Force Air Component Commander (JFACC), who reports directly to the Joint Force Commander, a structure not unique for IW operations. A slightly modified structure is used to support current operations in Iraq and Afghanistan based on Air Component Coordination Elements (ACCE), vice AOC's, attached to the major task forces assigned in each theater, and is proving quite effective.⁴⁸ There is currently one AOC standing and a single JFACC, reporting directly to the Central Command (CENTCOM) Commander that is not collocated with either operation. Based on the nature of Irregular Warfare, and the dispersed, dynamic, uncertain operating environment, is it not clear whether the Joint Force or the Air Force's doctrinal structure has been or will be successful in the future, but lessons learned in both Iraq and Afghanistan have shown that airpower is still most appropriately planned at the operational level, even when the ground campaign is being conducted in dispersed, often very independent locations.⁴⁹ The possibility that a more tactical, responsive, reactive decentralized planning approach may be required for operations of the future is not eliminated.⁵⁰ Though there are great stories of success within command and control of airpower during these two conflicts, it

⁴⁷ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 3.

⁴⁸ Ibid., 42.

⁴⁹ Headquarters United States Air Force, *Integration of Airpower in Operational Level Planning Report* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 22 August 2008), 6.

⁵⁰ Ibid.

cannot be deduced that the Air Force has yet got it right.⁵¹ Many critics of the AOC structure and associated bureaucracy do not believe that is organized efficiently for the future. Currently, there is limited redundancy in the structure with potential for AOC functions to be executed back at Shaw AFB, SC, collocated with Air Force Central Command. If one of the forward AOC's is compromised or disabled, command and control of airpower in that particular theater could be at risk for an undetermined period of time. In addition, Phase 0 activities or shaping activities, where IW is commonly conducted, are not currently included in the AOC processes nor primarily emphasized in their Joint Air Operations Plans (JAOP).

⁵¹ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 3.

Chapter 4

What Airpower Capability Is Really Needed?

Balance the Priority (Interstate vs. Irregular)

The changes that are needed within the airpower community to support IW operations are significant. A fundamental shift in the way that the Air Force and the other services think about warfare and employment of airpower is occurring and must continue to occur. While the other services have typically adjusted to the demands of IW more rapidly than the Air Force, there is a long way to go to ensure adequate support in the ongoing effort to win the war against violent extremism and beyond. Not improving the Air Forces ability to operate in and contribute to IW is seen as one of its greatest risks for the future. The continued inefficient employment of high-end, costly assets performing critical IW missions will continue unless the Air Force makes significant investment in change by balancing the acquisition of highly technological, drastically expensive end items designed to guarantee the U.S. continued air supremacy against major regional actors with those more appropriate for meeting the IW demand. On the contrary, the Air Force will put itself at risk if it does not appropriately assess the right level of priority it must continue to put on major combat operations and homeland defense within regular or conventional interstate warfare.⁵² Understanding that the Air Force has predominately invested in interstate scenarios in the past, more focus must be given to IW. “The USAF must first expand its strategic objectives from successfully waging IW to also enabling partner nations to

⁵² Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 7.

fight IW. Winning IW strategies are most often conducted by, with, and through the supported partner.”⁵³ This philosophy represents an institutional change that the Air Force must adopt, and subsequently support with the requisite DOTMLPF capabilities.

QDR, 2006 Recommendations

The Quadrennial Defense Review of February 2006, recognized the need for force reorganization and reprioritization in support of the future irregular war. The vision for Joint Air Capabilities stressed the need for systems to have far greater range and persistence, to be adaptable to support a wide range of payloads ranging from ISR to strike and most importantly for these systems to be able to “penetrate and sustain operations in denied areas.”⁵⁴ Additionally, the QDR emphasized the need for future airpower systems to include unmanned aircraft for surveillance and strike and that the capabilities produced will be able to achieve a much greater level of air to ground integration.⁵⁵ The QDR did not specifically address however, operations in permissive environments and the types of capabilities that could be most effectively employed and therefore considered. This represents a critical oversight that is deserving of future analysis. In April 2006, the *QDR Execution Roadmap for IW* was implemented. The five major initiatives for developing capabilities and capacity within the Department of Defense are:⁵⁶

- Transform the way DOD manages its military and civilian personnel to meet IW operational requirements (first priority), which entails changing the way the Military Services identify, access, educate, train, develop, utilize, and retain personnel with IW-associated expertise; and increasing opportunities for DOD personnel to obtain, maintain, and improve language proficiency and understanding of foreign cultures.

⁵³ Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 9.

⁵⁴ Department of Defense, *Quadrennial Defense Review Report: Reorienting Capabilities and Forces* (Washington, DC: Department of Defense, February 2006), 45.

⁵⁵ Ibid.

⁵⁶ Department of Defense, *IW Execution Roadmap* (Washington, DC: Office of the Deputy Secretary of Defense, 26 April 2006), 7.

- Rebalance GPF capabilities and capacity to conduct long-duration counterinsurgency (COIN) and counterterrorism (ST) operations; train, equip, and advise large numbers of foreign security forces; and foster the development of civil society and effective governance in ungoverned and under-governed areas.
- Increase SOF capability and capacity in two classified mission areas and to meet SOF air mobility requirements.
- Increase DOD capability and capacity to conduct counter-network operations, which entails identifying, finding, locating, characterizing, perturbing and disrupting extremist cells, networks, and individuals; and predicting their operational behavior.
- Redesign Joint and Service military and civilian education and individual and unit training for the conduct and support of IW.

The QDR and subsequent implementation of the *IW Roadmap* placed a level of priority on and was a significant first step in developing the right capacity and capabilities within the services to enable IW in the future.

The IW JOC, written in response to direction provided by the QDR Execution Roadmap, formed the basis of the Joint Capabilities Document-Capabilities Based Assessment (IWJOC JCD CBA) examining areas not specifically addressed in the QDR with a focus on operations in ungoverned and under governed (brown) environments. The below analysis relates to all three operating environments and addresses both capacity and capability issues in SOF and general purpose forces:⁵⁷

- Most Special Operations Forces (SOF) shortfalls are due to capacity related issues driven by increasing steady state demands for IW capabilities, limited GPF capability and requirements for other than overt military presence.
- Most General Purpose Forces (GPF) shortfalls are due to capability related issues.
 - GPF elements are not organized, trained, or equipped to function effectively at echelons required for dispersed IW operations (either in a Green or a Brown environment).

⁵⁷ Department of Defense, *Joint Capabilities Document for the Irregular Warfare Joint Operations Concept Capabilities-Based Assessment* (Washington, DC: JROC, Draft Version .9), ii.

- GPF personnel lack skill sets required for IW: language/culture, project and financial management, civil-military operations, law enforcement etc. (either in a Green or a Brown environment).
- Authorities/legal limitations inhibit GPF usefulness (Brown environment).

Lessons Learned

Perhaps the most valuable source of information on where airpower needs to go with respect to future capabilities, as they support IW, lies within the lessons learned from recent and current operations. Collectively, the Air Force is lagging behind in the adaptation and development of capabilities to support the joint, irregular fight. Key facts identified in both the recent Air Force lessons learned report on Iraq and Afghanistan as well as a briefing generated by Lieutenant Colonel Pietrucha of the Headquarters Air Force Warfare Center provide a great deal of insight into where the Air Force should focus.

Building partnership capacity is perhaps the most important contribution the Air Force can make to irregular warfare. It is important to note that most of the other capabilities mentioned within this essay can be built to centrally support this very important one. Lt Gen Donny Wurster, Air Force Special Operations Command, Commander, in a briefing to Air War College student body on 12 November, 2008 perhaps best captured this idea in his comment, “what good is fielding a propeller driven strike aircraft without the ability to put a member from a partner nation in the back seat for training?”⁵⁸ One must keep this central focus in mind as we discuss what capabilities are required for irregular warfare. In building partnership capacity, the Air Force must reach out beyond the Air Force special operations community. While the 6SOS is performing AvFID, most feel that they are significantly under resourced to do what is being

⁵⁸ Lt Gen Donald Wurster, “Airpower in Irregular Warfare” (lecture, Air War College, Maxwell AFB, AL, 12 November 2008).

asked of them.⁵⁹ Though the recommendations for resolution of this issue in Iraq and Afghanistan do not specifically address development of FID capabilities in general purpose forces within the Air Force, it is worthy of consideration. Failure to decentralize FID throughout the Air Force into the general purpose forces and perhaps even include it as a core competency will continue to lead to lack of recognition of its relative importance as well as lack of recognition during the planning, programming, and budgeting process. Instituting FID into the culture and responsibility of airmen as a whole will ensure adequate capacity to support on-going IW globally. Finally, negative effects of large scale bombing and unintended consequences, including negative influences on building partnership capacity and positively influencing relevant populations, makes other than absolute precision bombing in IW non-effective in IW.

With respect to intelligence, surveillance, and reconnaissance, the Air Force is currently using high value assets in inefficient, unintended ways to accomplish the mission only minimally in Iraq and Afghanistan. An example of this can clearly be seen in the fact that F-15E's and F-16's are now being equipped to perform ISR missions all the way to convoy escort missions.⁶⁰ In addition to the challenges the Air Force faces with this inefficient utilization of aircraft, it is also challenged with processing, exploiting, and disseminating the generated data adequately.⁶¹ The demand for ISR is tremendous and the Air Force does not have the current capacity to support it in terms of hardware or personnel, and airborne ISR is nearly at its breaking point.⁶² Robusting assets in our two major contingencies, leaves the other theaters short. ISR, as a package capability, is a global shortfall. Not only is density a problem, so is the capability of the

⁵⁹ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 12.

⁶⁰ Grace Jean, "Technology Gaps," *National Defense* 91, issue 632 (July 2006): 23.

⁶¹ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 25.

⁶² *Ibid.*, 28.

assets that we currently possess. Recent operations, including those in the European and Pacific theaters of operation have highlighted the need for new technology such as foliage penetrating sensors and a robust, reliable HUMINT infrastructure. The Air Force and other services alike must invest in ISR and push for acquisition of new, enabling technologies. That stated, the Army is leading the Air Force in development of many traditional Air Force roles.⁶³ Tactical reconnaissance is nearly entirely an Army executed mission, arguably because of the Air Forces inability to adequately support them, putting at risk the current relevance of the Air Force contributions to IW in this area. Priority of funding and weight of effort must be applied within the Air Force to fill capability shortfalls through systems acquisition that the Air Force should be providing as part of their core capabilities such as ISR in the case previously mentioned. It is not an absolute necessity for the Air Force to control all airborne ISR assets, but to establish thresholds and guidelines for command and control among the services. Low altitude, portable assets, such as rucksack portable unmanned aerial vehicles, provide irreplaceable tactical ISR capabilities for the Army, Navy, and Marines as well as standing joint organizations, giving them critical over-the-horizon visibility, but the Air Force must work to establish clear lines of command and control with all involved and maintain capabilities best suited to the Air Force in order to maintain its relevance.

Information Operations are currently being conducted by the Air Force. Recent operations have shown us that airpower is a significant contributor to the electronic warfare mission. Additionally, cyber operations have been executed with relative success in both Iraq and Afghanistan. A strategic information campaign should be developed for IW which spans all agencies of the government. In addition, resourcing is a problem within the Air Force's 67th

⁶³ Lt Col Mike Pietrucha, "All Over the Chart: A Few Thoughts from an Irregular Warfare Perspective" (powerpoint briefing v3.4.2, Headquarters Air Force Air Warfare Center, 22 February 2008). Slide 2.

Network Warfare Wing as it applies to manpower.⁶⁴ As a result, and the relevance of this capability to IW operations, the Air Force should take the necessary steps to address their resourcing and work within the Department of Defense to build a strategic IO plan that supports IW.

Air Mobility is a core U.S. Air Force competency and as such should be maintained and supported primarily by the Air Force. The Army is currently developing and fielding its own airlift capability and the other services have done the same, arguably because of the Air Force's inability to support both inter- and intra-theater airlift adequately. A non-standard, robust capability is required within the Air Force to support IW operations adequately. In all theaters with the exception of the Central Command, intra-theater airlift is a constant shortfall. IW necessitates that the Air Force acquire and maintain the ability to provide airlift, tactical through strategic, often with short takeoff and landing capability, adequate for operations in red, green, and brown operating environments across the globe. The Air Force is putting at risk relevance in IW without fielding these critical, often low-cost assets which in turn create a unique and necessary capability.

Agile Combat Support is proving a successful enabler in IW, as airmen are quickly learning new tactics, techniques and procedures that enable them to contribute in ways that positively influence the battlefield. The skills the Air Force support forces are developing are critical to further ensure the success of IW operations. The Air Force must continue development of these capabilities by formalizing training, tactics, techniques and procedures, and doctrine that are currently being provided through ad-hoc and Joint Sourcing Solution taskings.

⁶⁴ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 29.

These skills should be propagated throughout the AF in relevant support functions and organization.⁶⁵

Precision engagement represents one the Air Forces most asymmetric advantages against any particular enemy and is absolutely necessary in IW.⁶⁶ Preventing large scale unintended consequences of other than precise attack are absolutely necessary in being able to influence populations. The ability to find, fix, and finish with surgical precision is critical, especially within the boundaries of sovereign nations, or brown operating environments, where unintended consequences could have global impact. Our ability to continue successful execution in IW will also depend on our ability to place more emphasis on developing this skill within partner nations. In addition, the Air Force should continue the pursuit of developing non-standard precision strike capabilities that more closely align with the types of aircraft used in many of our priority countries to facilitate this training. The Air Force has begun fielding such assets, but should continue, with a balanced approach, pursuit of these characteristics in future systems acquisition for precision engagement assets.

Command and control of airpower as it supports IW will be critical for the future. Little analysis has gone into study of potential changes to the current way the Air Force commands and controls airpower as it applies to IW. Critics exist that claim the AOC structure is a large bureaucracy that is not responsive to the decentralized, time-sensitive, unpredictable nature of IW, but no solid evidence currently exists that shows the AOC's are not or have not been responsive. In Iraq and Afghanistan, the two ACCE's established seem to be operating with a marked level of success and are responsive to the Joint Force Comamnder's requirements. This stated, it is important to note that "there is nothing wrong with the AOC structure, but it cannot

⁶⁵ Headquarters United States Air Force, *Airpower in Irregular Warfare* (Washington, DC: Headquarters USAF HAF/A9L, Office of Air Force Lessons Learned, 25 September 2008), 36-40.

⁶⁶ Ibid., 41.

be considered the perfect structure for all possible conditions.”⁶⁷ The perceived large organizational bureaucracies that are each of the AOC’s, often well over 1000 personnel strong, tend to leave critics wandering why the Air Force cannot provide enough capacity to support on-going operations through its stated core capabilities. Despite the critics, the Air Force must be flexible and continue to look for ways to improve its processes, even if it means reassessing its organizational structures, maintain command and control of airpower at the operational level and maintain decentralized execution. In addition, the Air Force must look for ways to create redundancies and minimize risk for the future. Perhaps creation of alternate AOC capabilities that are surface maritime or submarine based would be a secure, stable option. Also, the Air Force must include Phase 0 activities in its AOC planning processes and emphasize airpower’s contributions to those activities in the JAOP and subsequent plans and orders. Finally, the Air Force must continue to ensure doctrinal updates are made to allow for even minor changes in organizational structures as with Iraq and Afghanistan.⁶⁸

⁶⁷ Lt Col Mike Pietrucha, “All Over the Chart: A Few Thoughts from an Irregular Warfare Perspective” (powerpoint briefing v3.4.2, Headquarters Air Force Air Warfare Center, 22 February 2008). Slide 10.

⁶⁸ Ibid.

Chapter 5

Conclusion

Irregular Warfare is not a new form of warfare, but does represent a form of warfare which demands a shift in the way that airpower must be employed and the capabilities that must be developed for the foreseeable future. It is true that the Air Force's ability to conduct persistent irregular warfare operations in areas which it has not typically operated in the past will ensure its relevance, be critical to the Department of Defense's ability to wage irregular warfare and ultimately determine our ability to win both current and future wars. Through examining what airpower currently contributes to IW and what it should be contributing based on lessons learned from recent and current operations, the gaps, seams and mismatches become evident.

In summary, the Air Force's stated contributions to IW are clear, though there is a marginal difference in terminology based on existing publications and doctrine. The real issue is not whether the Air Force contributes to IW but how much capacity is really required within its stated capabilities and what must be done to resolve any shortfalls. Critical as well, is the fact that it is absolutely necessary for the Air Force to maintain a balanced force that is capable and flexible to operate within conventional as well as irregular warfare.⁶⁹ From building partnership capacity to ISR, IO, air mobility, agile combat support, precision engagement, and command and control, the Air Force does have some capacity, and augmented by the other services, executes

⁶⁹ Headquarters United States Air Force, *Irregular Warfare Operating Concept (DRAFT)* (Washington, DC: Headquarters USAF HAF/A5XS, September 2008), 7.

IW today. They are not, however, executing completely or adequately in many respects in support of IW operations.

Continuing to rely primarily on special operations forces within the Air Force can no longer be an adequate solution simply because of capacity. The Air Force must train, organize and equip for IW and promulgate skills relevant to IW throughout the Air Force into the general purpose forces. The ability to conduct FID, COIN, and other critical tasks supporting IW operations across the Air Force and with great capacity will enable success in future operations. We are learning the lessons now, and our ability to adapt is critical.

In looking at assets that largely comprise capabilities, ISR and air mobility are two key capabilities within which the Air Force should consider much greater investment. Being able to meet the global demand for airborne ISR, meeting the demand for new capabilities, such as foliage penetrating capabilities, and being able to process, interpret, and analyze the critical products that it generates will guarantee the Air Force's relevance in this area and in its relevant contribution to IW. A clear focus on non-standard aviation assets that allows the DOD to operate in all IW environments, and emphasis on development of tactics, techniques, and procedures that support IW at the strategic through tactical level as they apply to all airpower capabilities is absolutely necessary. The Army and other services have developed specific capabilities to fill the gaps and seams that are generated by shortfalls within the Air Force and are arguably leading the Air Force in their support of IW. Many of what the Air Force considers core competencies are now being executed by sister services, threatening their very relevance in the future combat environment. The Air Force must get back to basics, invest in less expensive, more appropriate weapons systems and build capacity within their stated capabilities that support IW.

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